

PATENT
IBM Docket No. JP9-1999-0225

Listing of Claims (indicating status and amendments):

1 16. (New) Communication apparatus for simplified installation of ceiling-located wireless access
2 for communication between computer terminals in a wireless computer network, this using
3 power-line-connected ceiling power sockets intended for predefined mating connection of a
4 ceiling lamp, said communication apparatus comprising:

5 a power connecting section configured for such mating connection to such a power
6 socket;

7 a communicating section, connected to the power connecting section, having a wireless
8 communication control for conducting wireless communication to and from wireless-adapted
9 computer terminals and having a power line communication control for exchanging signals over
10 such a power line with at least one other wireless communication apparatus connected thereto;
11 and

12 a lamp connecting section, opposite to the power connecting section, and adapted as a
13 power socket for mating connection of such a ceiling light.

14 whereby, networking between such terminals is achieved without specially dedicated sockets or
15 wiring.

1 17. (New) A communication apparatus according to claim 16, wherein said power supply
2 connecting section includes a plug equivalent to the connection portion of a ceiling lamp
3 intended for mating connection with the power socket.

1 18. (New) A communication apparatus according to claim 16, wherein said lamp connecting
2 section includes a socket portion equivalent to the ceiling power socket.

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- 1 19. (New) A communication apparatus according to claim 16, wherein said communicating
- 2 section includes:
 - 3 a control unit section, connected between the power line communication control section
 - 4 and the wireless communication control section, which coordinates transfers between the power
 - 5 line communication control section and the wireless communication control section.
- 1 20. (New) The apparatus according to claim 16, further comprising a power supply section,
- 2 electrically connected to said power connecting section, which converts output power of the
- 3 power socket to a predetermined voltage to be supplied to energize said communicating means.
- 1 21. (New) The apparatus according to claim 16, further comprising:
 - 2 a connecting switch placed between the power supply connecting section and the lamp
 - 3 connecting section; and
 - 4 a connecting switch control section for switching the connecting switch ON or OFF based
 - 5 on predetermined signals received by the communicating section.

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1 22. (New) A network system comprising:

2 a plurality of wireless computer terminals located in two or more rooms which have
3 respective ceiling-lamp power sockets connected by a power line which are intended for
4 predefined attachment to a ceiling lamp for mounting and energizing thereof; and

5 a plurality of communication apparatus for conducting wireless communication to and
6 from the wireless computer terminals,

7 wherein each such wireless communication apparatus includes:

8 a power connecting section attached to a respective one of the power sockets, said power
9 connecting section being configured for such predefined attachment thereto;

10 a communicating section, connected to the power connecting section, and having a power
11 line control section for conducting communication to and from at least one other communication
12 apparatus over the power line and having a wireless communication control for conducting
13 wireless communication to and from such wireless computer terminals; and

14 a lamp connecting section opposite and electrically connected to the power connecting
15 section, having a socket portion configured as such a ceiling lamp power socket.

1 23. (New) The system according to claim 22, wherein, at least one said communication
2 apparatus has a ceiling lamp in such predefined attachment with its power socket.

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1 24. (New) The system according to claim 22, wherein said communicating means of the wireless
2 communication apparatus includes:

3 a communication control, connected between the power line communication control
4 section and the wireless communication control section, which controls the transfer of data
5 between the power line communication control section and the wireless communication control
6 section.

1 25. (New) The system according to claim 22, wherein each wireless communication apparatus
2 includes the power supply section, connected to the power line, which converts the power to a
3 predetermined voltage that is supplied to the communicating section.

1 26. (New) The system according to claim 22, wherein each of said communicating section
2 further comprises:

3 a connecting switch placed between the power connecting section and the lamp
4 connecting section; and
5 a connecting switch control section for switching the connecting switch ON or OFF based
6 on predetermined signals received by the communicating section.

Claim 1 (Canceled)

Claim 2 (Canceled)

Claim 3 (Canceled)

Claim 4 (Canceled)

Claim 5 (Canceled)

Claim 6 (Canceled)

Claim 7 (Canceled)

Claim 8 (Canceled)

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Claim 9 (Canceled)

Claim 10 (Canceled)

Claim 11 (Canceled)

Claim 12 (Canceled)

Claim 13 (Canceled)

Claim 14 (Canceled)

Claim 15 (Canceled)